

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently amended): A method for activating and modulating the immune system of an animal comprising:
growing bacteria in a medium;
exposing said bacteria to biological, chemical or physical stress for at least two or more sequential periods of stress wherein each period of stress is defined by a period of stress exposure of approximately 20 minutes or less so that the bacteria release a stress response product comprising stress response factors (SRFs), wherein said SRFs are not bactericidal proteins or peptides;
separating said medium and stress response product from said bacteria to form a separated product;
filtering said separated product to remove substances having a molecular weight of greater than 10kDa to form a filtrate;
administering said filtrate to said animal.

Claims 2-3 (Canceled)

Claim 4 (Previously presented): The method of claim 1 wherein said medium comprises a non-nutritive saline media at pH values of 6.0 to 8.0.

Claim 5 (Previously presented): The method of claim 4 wherein said saline media is a phosphate-buffered saline having a pH of about 7.0.

Claim 6 (Previously presented): The method of claim 1 wherein the bacteria are selected from the group consisting of *Lactobacillus*, *Staphylococcus*, *Streptococcus*, *Pediococcus*, *Pseudomonas*, *Bacillus*, *Escherichia*, *Listeria*, *Enterococcus*, and *Klebsiella*.

Claim 7 (Previously presented): The method of claim 6 wherein the bacteria are selected from the group consisting of *L. acidophilus*, *L. caseii*, *L. fermentum*, *L. plantarum*, *L. monocytogenes*, *S. aureus*, *S. typhimurium*, *P. acidolactici*, *B. coryneforme*, *E. coli*, *E. faecium*, *S. pyogenes*, and *K. pneumoniae*.

Claim 8 (Previously presented): The method of claim 1 wherein the bacteria are propagated at a temperature ranging from approximately 22°C to approximately 37°C.

Claim 9 (Canceled)

Claim 10 (Previously presented): The method of claim 1 wherein the bacteria are exposed to a stress while they are in the stationary phase of their life cycle.

Claim 11 (Previously presented): The method of claim 1 wherein the filtering step includes: passing said separated product through a 0.22 µm filter to form a sterilized product; and passing said sterilized product through a filter with a molecular weight cutoff of 10 kDa.

Claim 12 (Previously presented): The method of claim 1 wherein the filtrate containing the stress response factors (SRFs) with a molecular weight less than 10kDa is administered to an animal selected from the group consisting of humans, poultry and livestock.

Claim 13 (Previously presented): The method of claim 1 wherein the stress response product is administered in a concentration of about 1000 to 50,000 AU of said stress response product/ml, corresponding to a reading at 254 nm in the UV range of light wherein the concentration of the stress response factors gives an Optical Density of 1.0 to 5.0.

Claim 14 (Original): The method of claim 1 wherein the stress response product is administered in a manner selected from the group consisting of orally, topically, and parenterally.

Claim 15 (Previously presented): The method of claim 1 wherein the animal is administered stress response products having a weight of between 0.5 and 3 kDa.

Claim 16 (Original): The method of claim 1 wherein the stress response products are administered as an adjuvant for oral or parenteral vaccines.

Claim 17 (Previously presented): The method of claim 1 wherein the bacteria are exposed to at least two or more sequential periods of stress wherein each period of stress is approximately 10-20 minutes.

Claim 18 (Previously presented): The method of claim 17 wherein the bacteria are exposed to sequential periods of stress by transferring the bacteria from growth media into non-nutritive media in the initial period of stress, then subsequently transferring the bacteria to non-nutritive media in the sequential periods of stress.

Claim 19 (Original): The method of claim 18 wherein the bacteria is exposed to three sequential periods of stress.